news and reports

90th SMPTE Convention: Lake Placid Club, Essex County, N.Y., October 1–6

Attention Authors: The work of organization and arrangement, now going forward by the Program Chairman, Topic Chairmen and Papers Committee, is around the theme of *Integration of Motion-Picture and Electronic Systems* (See the May 1961 *Journal*, p. 382.)

The deadline for Author Forms and the 50- to 75-word abstracts is July 17. Authors who have a tendency to procrastinate should bear in mind that the Program Chairman may, on July 17, be inundated by a flood of abstracts, making the task of evaluation and arrangement a difficult one. If your paper comes at the last minute or or late, its chances for good scheduling are not so good.

When referring to the List of Topic Chairmen (May Journal, p. 382) if you are uncertain where your paper fits, submit it direct to 90th SMPTE Program Chairman *C. Loren Graham*, Kodak Park Bldg. 65, Rochester 15, N.Y.

6th International Congress on High-Speed Photography Hotel Kurhaus, Scheveningen, Netherlands, September 17–22, 1962

6th Congress Chairman: *Dr. J. G. A. de Graaf*, 14, Burgemeester de Monchyplein, The Hague, Netherlands

Scheveningen, chosen as the meeting place for the 6th International Congress on High-Speed Photography, is the seaside resort for The Hague. Announcement of the final decision as to time and place of meeting was made by 6th Congress Chairman Dr. de Graaf. A brochure containing advance information and details of the 6th Congress is being prepared in the Netherlands and is expected to be ready for mailing in September 1961. *Max Beard*, 10703 E. Nolcrest Drive, Silver Spring, Md., has been appointed 6th Congress Deputy Chairman. (Mr. Beard was Chairman of the 5th Congress.) Activities of the SMPTE Instrumentation and High-Speed Photography Committee related to 6th Congress planning are expected to include assistance with the Papers Program to the extent of solicitation and review of papers from the United States. Chairman of the Committee is Morton Sultanoff, 626 Roberts Court, Aberdeen, Md. Questions relating to 6th Congress plans and activities may be addressed to Dr. de Graaf or to Deputy Chairman Beard.

Education, Industry News

Four awards in the Scientific and Technical Class II and Class III categories, voted by the Academy of Motion Picture Arts and Sciences for outstanding achievements, were presented at the ceremonies held April 17 in Santa Monica, Calif. Only one award was made this year in the Class II category, in constrast to the five presented last year (*Journal*, p. 364, May 1960). The sole recipient of the Class II plaque was Ampex Corp. which was cited "for the production of a well-engineered multipurpose sound system combining high standards of quality with convenience of control, dependable operation, and simplified emergency provisions." The system is designed to reproduce optical and stereophonic magnetic soundtracks from either 35mm or 70mm film. The complex circuits for the system are controlled by a single set of pushbutton selectors.

The three Class III Awards (two were presented last year) were presented to:

(1) Arthur Holcomb, Petro Vlahos, and the Columbia Studios Camera Department for a flicker-indicating device. Flicker has always been a serious camera problem. In most cases a flicker situation is not known until the material is processed and screened which can be annoying and costly if retakes are necessary. The flicker-indicating device provides the cameraman with a visual means of detecting the camera malfunctions which cause screen flicker.

(2) Anthony Paglia and the 20th Century-Fox Mechanical Effects Department for a miniature flak gun, designed and constructed to fire timed ammunition which realistically and economically simulates flak for special effects photography.

(3) Carl Hauge, Robert Grubel and Edward Reichard of Consolidated Film Industries for the development of an automatic developer replenisher system, which employs an infrared scanning unit with monitoring controls for precise chemical control.

A projectile ½-in. in diameter, traveling at a speed of 26,200 ft/sec through a tank where the air pressure was equivalent to that at an altitude of 120,000 ft, was photographed at the von Karman Gas Dynamics Facility, located on the Arnold Air Force Station, Tennessee. Optical information about the nature of airflow about the projectile, and its position and attitude has been obtained by shadowgraph arrangements as well as other photographic methods. The shadowgraph can be obtained because of the tremendous rate of speed at which the projectile is traveling which creates a glow around the projectile. This "glow" automatically triggers a camera at the exact moment the projectile passes between the film and the light source, resulting in a silhouette of the projectile. In one arrangement two 4 by 5-in. externally mounted cameras were used in combination with two 15-in. Fresnel

lenses, with the plane of focus for the camera-lens/Fresnel-lens combination falling at the centerline of the range. A plane mirror provided the light path from the single spark source of illumination through the other Fresnel lens. Other data-gathering methods are being studied in a long-range missile research program.

A significant trend toward automation was illustrated by equipment displayed by RCA at the Convention of the National Association of Broadcasters held in Washington, D. C., May 7–10. Equipments designed on the building-block principle, permitting the gradual addition of modules for partial, and eventually complete, automation of TV station operations were exhibited. The display included equipment for handling the station break "panic period" and a full technical operations system. A film slide projector, cued and operated by a recorded tone signal from the RCA RT-7A tape recorder was demonstrated.

An electronic teaching machine designed and presently in use by the New York Institute of Technology, 135 W. 70 St., New York, has attracted considerable attention as one of the most highly developed of the teaching machines installed in various schools and training centers throughout the country. Still the subject of spirited debate and frequent viewings with alarm, the trend in educational procedures, ushered in by teaching-with-television, seems to be rapidly advancing toward a greater reliance upon teaching machines. especially for instruction in science, mathematics and language. The whole subject of teaching machines is an intriguing one and has been viewed with a glint in the eye of many a science-fiction writer. A widely circulated non-fiction publication called the Wall Street Journal described teaching machines as "robot teachers" (p. 1, Aug. 8, 1960). The article, by-lined by Gene Bylinsky, named the NYIT's teaching machine Mr. Atd 1 (for Automatic Teaching Device) and described him (it?) as a "chatty robot" which (who?) tests a student's understanding "by asking questions which the student answers by pressing buttons."

The description of the machine given by Alexander Schure, NYIT President, makes no reference to "robots." The NYIT system seems to differ from some of its predecessors and contemporaries mainly by the arrangement and use of its various components. It includes a punched tape unit to record students' answers, and makes use of closed-circuit television, a tape recorder or record player, earphones for audio instruction, and a microphone-like device that permits a student at his desk to talk with the (human) instructor without disturbing other students.

Electronic and other teaching aids exhibited and demonstrated at the Annual Convention of the Department of Audio-Visual Instruction (DAVI) held in Miami Beach in April supplemented a four-day program of addresses, discussions, workshop sessions and small group meetings. A report from Anna L. Hyer, Executive Secretary, DAVI, noted that the exhibit was one of the largest ever assembled for a meeting of this kind. Several sessions were devoted to the subject of the use of electronics in new methods of teaching foreign languages. Fourteen countries other than the United States were represented by audio-visual specialists who discussed audio-visual programs in their respective countries. A special group session was held to discuss the topic "Training for Film Production." Chairman of the Session was Jack Tyo, System Development Corp., Santa Monica, Calif. Discussion leaders were Melvin Brodshaug, Dean of the School of Public Relations, Boston University; and Bob Wagner, Director of the Photography Department, Ohio State University. The keynote address was given by James Finn, President of DAVI, who spoke on "The Tradition in the Iron Mask."

The Thirteenth Annual National Institute for Audio-Visual Selling will be held July 16–20 at Indiana University, Bloomington, Ind. The Institute is a joint undertaking of the National Audio-Visual Association and Indiana University. Visiting lecturers and instructors include business leaders of the audio-visual industry and faculty members of the University's Audio-Visual Center and School of Business and Economics.

The Electronics Division of the American Society for Quality Control (ASQC) is sponsoring a Conference on the subject of Maintainability to be held in October in Baltimore, Md. Inquiries should be addressed to The Martin Co., Mail No. 2000, Baltimore 3, Md. Program topics will include: Specifying Maintainability; Effects of Human Factors on Maintainability; Systems Level Trade Offs — Reliability vs. Maintainability vs. Availability; Choosing Degrees of Automaticity in Maintainability; Designing for Maintainability; Measurement and Demonstration of Maintainability; Predicting Maintenance Time; "Throw Away" Maintenance; Pricing and Costing for Maintenance; and Organization for Effective Maintenance.

A three-day International Television Symposium sponsored by The International Telecommunications Union was held May 17–21 in Montreux, Switzerland, as part of the First International Festival of TV Arts and Sciences held May 15–27. Topics covered during the Symposium included World Television Trends; Television Equipment; Color Television; and Uses of Television and Space Broadcasting.

A two-year contract for a series of medical programs to be shown over closed-circuit TV has been entered into by Theatre Network Television, Inc. (TNT) and CIBA Pharmaceutical Products, Inc. Under the terms of the contract, the programs will be produced by TNT to be shown over the Eidophor color TV projector. The first of the series was a one-hour program presented before the annual meeting of the American Academy of General Practice on April 19 in Miami. The contract calls for 10 such programs for medical groups throughout the country.

Camera Equipment Co. has been acquired by a group of New York investors headed by Robert B. Bregman of Brandenburg & Co. and Chairman of the Board of Venture Capital Corp. of America, according to an announcement made jointly by Mr. Bregman and Frank C. Zucker, President of Camera Equipment Co. Present policies and services will be continued. Mr. Zucker and other officers and employees on the management level will become officers and employees of the acquiring corporation. Plans for expansion in the equipment and electronics fields are being made.

Visual Electronics Corp., 356 W. 40 St., New York 18, has been appointed distributor for TV camera tubes manufactured by English Electric Valve Co., Ltd., Chelmsford, Essex, England. The firm manufactures both 3-in. and 4½-in. image orthicons.

Purchase of the former studios and sound stages of KCOP-TV, 1000 Cahuenga Blvd., Hollywood, from NAFI Corp., to be converted to a rental facility for independent and industrial motion-picture producers, has been announced. The property, which includes buildings covering about 19,000 sq ft located on about 32,000 sq ft of land, was purchased by Birns & Sawyer Cine Equipment Co., 6424 Santa Monica, Blvd., Hollywood 38, acting with a group of motion-picture executives. Purchase price was reported at $250,000 and an estimated $50,000 will be spent in modernizing the property. A 250-ft tower, a well-known landmark, looks down on the studio which will be known as Cahuenga Tower, Inc.

Ballantyne Co., 1712 Jackson St., Omaha, Nebr., manufacturers of theater and drive-in theater sound and projection equipment, has become a wholly-owned subsidiary of ABC Vending Co. of New York. The firm's name has been changed to Ballantyne Instruments and Electronics, Inc., but its policies and the type of products it manufactures will continue as before, the announcement stated.

A new Western Development and Service Division located at 2121 C Placentia Ave., Costa Mesa, Calif., has been established by Flight Research, Inc., P.O. Box 1-F, Richmond 1, Va. Lloyd M. Adams has been appointed Technical Director of the new division. He has served as optical and photographic engineering consultant to a number of firms and has a

Erratum

January 1961

"Nontheatrical Films — Interim Report No. 2" by John Flory and Thomas W. Hope, pp. 68–72.

On p. 68, par. 1, Fig. 1 and Tables I, IV and V

For: $389 million (total dollar volume)

Read: $388 million

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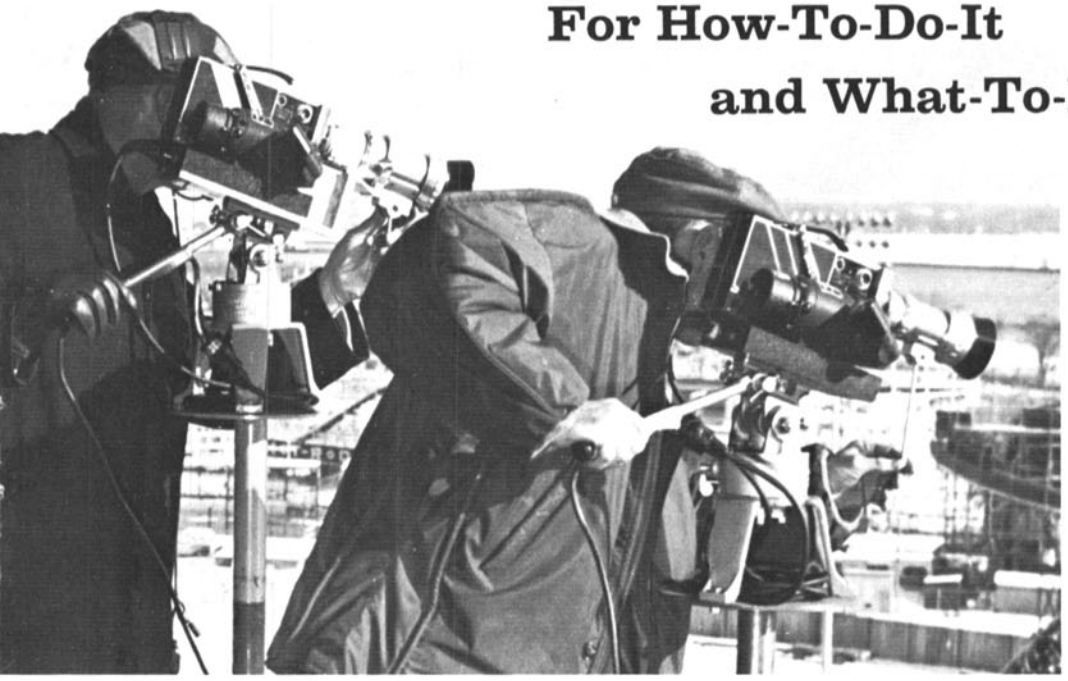

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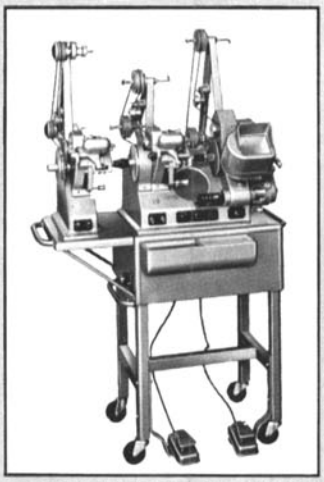

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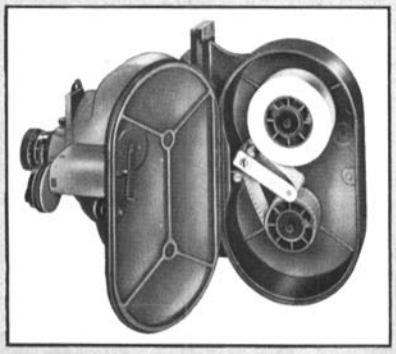

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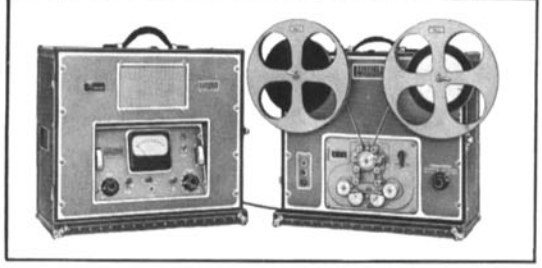

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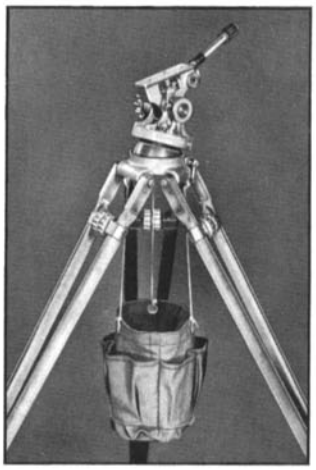

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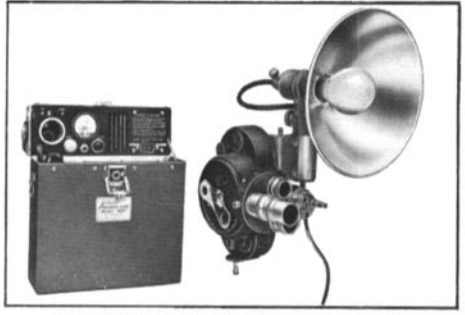

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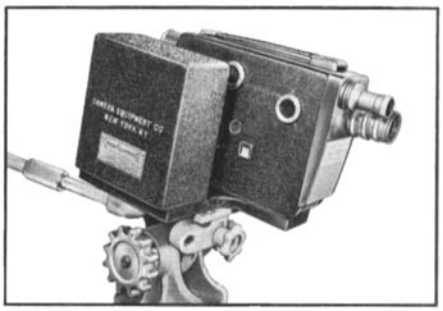

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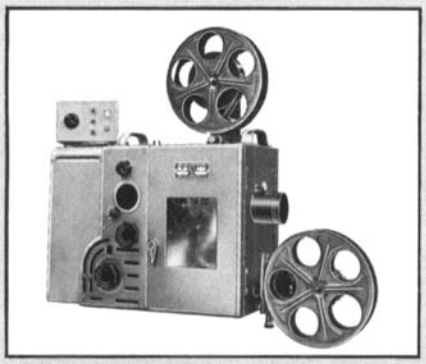

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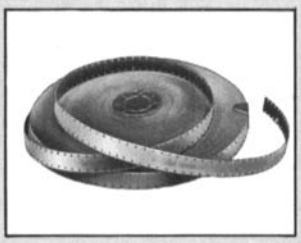

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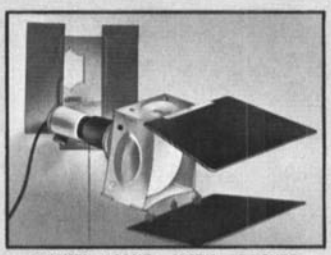

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broad experience in the design of photographic equipment and scientific instruments. Flight Research, Inc., has been actively engaged in the development and manufacture of photographic instrumentation equipment and electronic control equipment for aircraft since 1948. In January 1960, the company became a subsidiary of Giannini Scientific Corp., under an arrangement by which it continues to maintain autonomy of operation.

S.O.S. Photo-Cine-Optics, Inc., is the new name of the firm formerly known as S.O.S. Cinema Supply Corp. The new name represents the firm's expanding interests into the fields of photoinstrumentation, medical photography, x-ray and cinecardiology. Officers of the newly named firm are: President, J. A. Tanney; Vice-President, W. H. Allen; Secretary, M. E. Tanny; and Treasurer, D. J. Capano.

Measurement Systems, Inc., 53 Water St., South Norwalk, Conn., is a new firm created to develop and manufacture electrooptical and infrared equipment. President and Chief Engineer is John R. Yoder, and Vice-President and General Manager is Morton H. Mehr. Mr. Yoder was formerly Chief of the Advanced Development Section of Perkin-Elmer Corp., and Mr. Mehr was formerly a Group Leader in the same section where he was project engineer on an infrared surveillance system and directed a portion of the development and field installation of a number of large telescopic camera systems. Early plans for the new firm include work on equipment developed under research and development contracts. A prospective area of activity is in the field of electrooptics in which geometric optics, electronic circuitry and solid state devices are all parts of a complete system.

An outside broadcast television vehicle equipped by Marconi's Wireless Telegraph Co., Chelmsford, Essex, England, traveled 1750 miles overland from Chelmsford to Moscow to take part in the Moscow Trade Fair held May 19–June 4. The vehicle, equipped with four Marconi Mark IV cameras, contained all equipment needed for program production. Special emphasis was given to providing a high standard of comfort and convenience for the operators in the design of the vehicle and arrangement of equipment.

One-day rental of portable standard units of Beckman & Whitley equipment for high-speed photoinstrumentation is now possible under a new program announced by Beckman & Whitley, Inc., 973 San Carlos Ave., San Carlos, Calif. The new rental program is planned for use on small research and development projects and complements the normal equipment-leasing contracts which ordinarily cannot be arranged for less than 36 months. The new program applies to Models 189 Dynafax and Magnifax cameras and involves a daily or monthly rental charge based on the cost of the instruments and the period of rental. The rental program also includes instruction and consultation services.

Frank Lewin's song cycle *Innocence and Experience* (noted in the *Journal*, p. 300, Apr. 1961), a musical arrangement of nine poems by William Blake had its first New York performance May 8 in Carnegie Recital Hall. The obvious difficulties of creating a musical accompaniment for the poems (especially the one beginning "I saw a chapel . . ." with its strange and (to some readers) repellent Freudian imagery) were magnificently solved. The same idea, developed by a less sensitive composer could well have resulted in pleasant music entirely unrelated to Blake — more suitable for Wordsworth. Fortunately, Mr. Lewin's music enhanced rather than detracted from the poet's quality and imagery. The voice of Helen Boatright, accompanied by an ensemble conducted by Loren Glickman was entirely adequate to the demands made upon it. Mr. Lewin, who is widely known as a composer of film and theater music, is the author of the SMPTE publication *The Soundtrack in Nontheatrical Motion Pictures* which was first published in installments in the March, June and July 1959 *Journals*.

Aubrey Harris has been appointed Senior Engineer for Ampex Electronics, Ltd., Reading, Berkshire, England. He has been associated with the parent organization, Ampex Corp., Redwood City, Calif., since 1958. Previous affiliations included British Post Office Research Station; Marconi's Wireless Telegraph Co., and Station ZBM-TV in Bermuda where he was Chief Engineer.

Abstracts

Abstracts from other Journals, chosen for importance and timeliness, are published in the *Journal* from time to time. The greater number of these abstracts are translations, chiefly from the U.S.S.R., and made available by the *Kodak Monthly Abstract Bulletin*.

The subject areas are grouped below

Aerial Photography
Cameras and Equipment (Except High-Speed)
Color Photography and Color Development
Film and Its Properties
Film Processing Apparatus and Chemicals
High-Speed Photography and Instrumentation
Sensitometry and Image Structure
Television

AERIAL PHOTOGRAPHY

Technical Improvements at the LTTs (Leningrad Television Center) (in Russian), *Tekh. Kino i Televideniya, 4:* 76, June 1960.

Brief descriptions are given of a telecine machine which is capable of transmitting 8mm films, a magnetic sound-reproduction unit for use with a 16mm telecine machine and other pieces of apparatus recently produced in the Leningrad Television Center.—S.C.G.

CAMERAS AND EQUIPMENT (Except High-Speed)

The Spectrovisor, M. M. Gurevich and K. I. Kolyadin, *Optics and Spectroscopy* (transl. ed. of *Optika i Spektroskopiya*), *9:* 131–133, No. 2, Aug. 1960.

The author describes a fast spectrophotometer for the visible part of the spectrum, which traces the transmission coefficient-vs.-wavelength curves of the sample and a standard on the screen of a cathode-ray tube. Each of the curves is traced in 0.01 sec. A motion-picture camera takes 12 photographs of the screen per second, thus making it possible to record the optical aspect of the kinetics of some chemical reactions. (Authors' Abstract.)

COLOR PHOTOGRAPHY AND COLOR DEVELOPMENT

Color Reproduction with Fuji Color Negative Film. 1. The Effect of the Ultraviolet-Sensitivity of the Reproduction (in Japanese, with abstract and figure legends in English), S. Fujisawa, S. Yamaguchi and S. Watanabe, *J. Soc. Sci. Phot. Japan, 22:* 198–201, No. 4, Dec. 1959.

Since a color film is very sensitive to ultraviolet radiation, and the human eye is not, and since daylight or any artificial light contains ultraviolet radiation, the use of a filter which absorbs radiation shorter than 410 mμ is suitable for any color film. The filter gives especially good results when used in photographing greenish or yellowish objects. (Authors' Abstract.)